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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,254	06/23/2003	Travis D. Fox	STL11083	1906

7590 07/26/2005  
Seagate Technology LLC  
Intellectual Property - SHK2LG  
1280 Disc Drive  
Shakopee, MN 55379-1863

EXAMINER

KIM, HONG CHONG

ART UNIT	PAPER NUMBER
2186	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/602,254

Applicant(s)

FOX ET AL

Examiner

Hong C. Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,14 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 3-13,15 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/25/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**Detailed Action**

1. Claims 1-20 are presented for examination. This office action is in response to the application filed on 6/25/03.
2. The information disclosure statement (IDS) submitted on 6/25/2003 is being considered by the examiner.

***Specification***

3. The abstract of the disclosure is objected to because it is not in a single paragraph format. Correction is required. See MPEP § 608.01(b).

***Claim Objections***

4. Claims 1-18 are objected to because of the following informalities: In claim 1 lines 6-8, "the utility" (two occurrences) should be changed to -- a utility--. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 14, and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Olds et al. (Olds) US Patent Pub No. 20030105919.

As to claim 20, Olds discloses a data storage device comprising a head disc assembly (Fig. 3 Ref. 112) with stored data; a controller (Fig. 3 Ref. 126) communicating with a head disc assembly, and a read look ahead extension routine programmed into the controller, the read look ahead extension routine acquires data from the stored data as a speculative data by steps for acquiring speculative data (blocks 53 and 55).

As to claim 1, Olds discloses a data transfer method comprising the steps of: identifying first and second access commands (block 6 lines 1-5), and acquiring speculative data in conjunction with an execution of the first access command in lieu of executing the second access command when the utility of the acquired speculative data is greater than the utility of executing the second access command (block 9 lines 5-12).

As to claim 2, Olds discloses the invention as claimed above. Olds further discloses acquiring the speculative data in conjunction with an execution of the first access command is determined by steps comprises ascertaining the second command is a write-back access command (Fig. 9 Ref. 130 and block 63), deciding a data following the first command has a heightened opportunity of servicing a future request

for data (Fig. 5 Ref. 164); and deducing a time period for acquiring the data following the first command (Fig. 5 and block 55).

As to claim 14, Olds discloses the invention as claimed above. Olds further discloses in which the deduced time period for acquiring the data following the first access command is a deduced amount of data determined by a latency period associated with a scheduled access command (block 55).

As to claim 17, Olds discloses the invention as claimed above. Olds further discloses in which the first access command is a read access command (Fig. 5 Ref. 150, block 53), the speculative data is a read on arrival data (block 53, RLA) and wherein the method further comprises steps of: preparing a read/write channel electronics for execution of the read access command (Fig. 3 Ref. 138); executing the read access command; and acquiring the read on arrival data in conjunction with the execution of the read access command (Block 53).

As to claim 18, Olds discloses the invention as claimed above. Olds further discloses in which the first access command is a write-back access command 9Fig. 9 Ref. 170), the speculative data is a read on arrival data (Fig. 5 and block 61) and wherein the method further comprises steps of: preparing a read channel (Fig. 3 ref. 138) for execution of the write-back access command; executing the write-back access

command (Fig. 9 Ref. 170) ; and acquiring the read on arrival data in conjunction with the execution of the write-back access command (blocks 61 and 63).

As to claim 19, Olds discloses the invention as claimed above. Olds further discloses a method comprising the steps of identifying a first and second access commands (block 6); ascertaining the second pending command is a write-back access command with an access period (Fig. 9 Ref. 130 and block 63); deciding a data preceding the first access command has a heightened opportunity of servicing a future request for data (Fig. 5 Ref. 164); and acquiring the data preceding the first command for a period beyond the access period of the write-back access command (Fig. 5 and block 55).

#### ***Allowable Subject Matter***

6. Claims 3-13 and 15-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and overcome claim objections.

#### ***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892.

2. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) days from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 USC 133, MPEP 710.02, 710.02(b)).

3. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. ' 1.111(c).

4. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Kim whose telephone number is (571) 272-4181. The examiner can normally be reached on M-F 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 whose telephone number is (571) 272-2100.

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6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7. **Any response to this action should be mailed to:**

Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**or faxed to TC-2100:**  
571-273-8300

Hand-delivered responses should be brought to the Customer Service Window (Randolph Building, 401 Dulany Street, Alexandria, VA 22314).

HK  
Primary Patent Examiner  
July 15, 2005

